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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,380	01/14/2004	Jyrki Laaksonheimo	1381-0307P	2366

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EXAMINER	
SMITH, TYRONE W	
ART UNIT	PAPER NUMBER
2837	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	01/19/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/19/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/756,380	LAAKSONHEIMO, JYRKI	
	Examiner	Art Unit	
	Tyrone W. Smith	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Goto et al (5828014).

Regarding Claims 1-8, Goto discloses a elevator speed control circuit which includes a measuring unit (Figure 9) for measuring a speed value of a motor; a calculating unit (Figure 9 item 2) for calculating averages of a speed reference and a speed measurement from the measured speed value; an identifying unit (Figure 9 item 3 and Figure 9 item 16) for identifying a gain factor and a zero factor, and a correcting unit (Figure 9 item 51) for compensating a drift in the measuring unit, the correcting unit compensating for the drift on the basis of the average of the speed reference, the average of the speed measurement, the identified gain factor, the identified zero factor, and on the basis of a forgetting factor. Refer to the abstract, column 2 lines 21-64 and column 6 lines 44-58. However, Goto does not disclose the motor being a synchronous permanent magnet motor.

In re Stevens, 212 F.2d 197, 101 USPQ 284 (CCPA 1954) (Claims were directed to a handle for a fishing rod wherein the handle has a longitudinally adjustable finger hook, and the hand grip of the handle connects with the body portion by means of a universal joint. The court held that adjustability, where needed, is not a patentable advance, and because there was an art recognized need for adjustment in a fishing rod, the substitution of a universal joint for the

single pivot of the prior ad would have been obvious. In this case, the use of a synchronous permanent magnet motor connected to a feedback sensor is commonplace in the motor control art, wherein Goto's reference the speed of the motor is measured thus performing all the tasks in the claims. The use of a synchronous permanent magnet motor is a minor adjustment of the current invention.

It would have been obvious to one of ordinary skill in the at the time of invention use synchronous permanent magnet motor with Goto's invention a elevator speed control circuit. The advantage of combining the two would provide a system that would actively suppress the vibration of an elevator car used by the speed control circuit.

3. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Goto et al (5828014) in view of Sawai et al (4967128).

Goto discloses a elevator speed control circuit which includes a measuring unit (Figure 9) for measuring a speed value of a motor; a calculating unit (Figure 9 item 2) for calculating averages of a speed reference and a speed measurement from the measured speed value; an identifying unit (Figure 9 item 3 and Figure 9 item 36) for identifying a gain factor and a zero factor', and a correcting unit (Figure 9 item 51) for compensating a drift in the measuring unit, the correcting unit compensating for the drift on the basis of the average of the speed reference, the average of the speed measurement, the identified gain factor, the identified zero factor, and on the basis of a forgetting factor. Refer to the abstract, column 2 lines 21-64 and column 6 lines 44-58.

However, Goto does not disclose the use of a forgetting factor or similar for updating the gain factors.

Sawai discloses a servo motor control device which includes forgetting factors (Figure 7 items 1/Ki and Kif or similar (Figure 7 item A; column 1 lines 57-68 and column 2 lines 1-16).

However, neither Goto nor Sawai disclose the motor being a synchronous permanent magnet motor.

In re Stevens, 212 F.2d 197, 101 USPQ 284 (CCPA 1954) (Claims were directed to a handle for a fishing rod wherein the handle has a longitudinally adjustable finger hook, and the hand grip of the handle connects with the body podion by means of a universal joint. The court held that adjustability, where needed, is not a patentable advance, and because there was an art recognized need for adjustment in a fishing rod, the substitution of a universal joint for the single pivot of the prior ad would have been obvious. In this case, the use of a synchronous permanent magnet motor connected to a feedback sensor is commonplace in the motor control art, wherein Goto's reference the speed of the motor is measured thus performing all the tasks in the claims. The use of a synchronous permanent magnet motor is a minor adjustment of the current invention.

Response to Arguments

4. Applicant's arguments filed October 12, 2006 have been fully considered but they are not persuasive.

Applicant argues that that the references do not disclose identifying gain and zero factors in the application. Examiner takes Applicant arguments in full consideration.

Examiner's rejection is based on the claims as presented. Goto discloses a elevator speed control circuit which includes a measuring unit (Figure 9) for measuring a speed value of a motor; a calculating unit (Figure 9 item 2) for calculating averages of a speed reference and a speed measurement from the measured speed value; an identifying unit (Figure 9 item 3 and

Figure 9 item 16) for identifying a gain factor and a zero factor, and a correcting unit (Figure 9 item 51) for compensating a drift in the measuring unit, the correcting unit compensating for the drift on the basis of the average of the speed reference, the average of the speed measurement, the identified gain factor, the identified zero factor, and on the basis of a forgetting factor. Refer to column 4 lines 9-33 wherein the specification of Goto explains that the feedback means includes a phase compensating filter which may be a lead filter that adjusts the phase of the extracted resonance frequency components to an appropriate phase for feedback, and an adder that adds the phase-adjusted, extracted vibration components to the torque indicating signal from the speed amp to provide vibration-canceling feedback. The speed control circuit takes the difference between the speed command and the actual car speed value multiplies it by the gain K., extracts the components resulting from the vibration of the rope using a bandpass filter, and, using a phase compensating filter, provides feedback to the torque indicating output of the speed amp as a vibration suppression signal, to provide the torque command to the motor. Thus, the vibration of the car is actively suppressed in the elevator speed control. Examiner suggests that the Applicant express clearly be definition what is gain/zero factors is the specification to overcome the prior art of record.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W. Smith whose telephone number is 571-272-2075. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tyrone Smith
Patent Examiner

Art Unit 2837

LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER